BEFORE THE

DOCKET FILE COPY ORIGINAL

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Compatibility Between Cable Systems	)	PP Docket No. 00-67
And Consumer Electronics Equipment	)	
	)	

COMMENTS OF
TIME WARNER CABLE

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SUMMARY

The Commission's overriding focus in this proceeding must be the promotion of consumers' ability to buy and use consumer electronics ("CE") equipment, most importantly, digital television receivers, that can fully interact with, and take advantage of, all services offered today or in the future by cable operators and other multichannel video programming distributors ("MVPDs"). Meeting this objective requires not only promoting the development of equipment that has adequate connectivity for advanced interactivity, but also making sure that consumers have sufficient information to make informed buying decisions.

Copy Protection

Reliable copy protection remains essential to digital television's success. Absent reliable copy protection, content suppliers will not make high quality content available in a digital format, a prerequisite to broad acceptance of digital television. Accordingly, all consumer electronic equipment must incorporate sufficient copy protection technology to permit decrypted digital signals to flow directly to the final display circuit of consumer video equipment but not to any circuit where such decrypted signals can be stored, forwarded, copied, or exported. Presently, 5C copy protection technology presents the a viable solution for the digital set-top/digital TV interface. Effective copy protection is equally important for the POD/host interface applicable to "integrated" digital CE devices. Without such barriers to unauthorized copying, the transition to digital television will not likely become a reality.

Labeling

Consumers must have a clear understanding of the capabilities of any digital television receiver or device that they may purchase. A recent industry agreement establishes a voluntary labeling scheme to distinguish between CE devices capable of delivering all functionalities and services offered by cable operators and other MVPDs, and those limited in what they can offer.

Under the licensing scheme, potential consumer confusion and frustration can easily arise due to the difficulty in distinguishing between digital television devices equipped with the IEEE 1394/5C connector, and those lacking such interactive connectivity. Without a 1394/5C connector, digital television devices cannot provide consumers with the full functionality of interactive digital services offered now or in the future by cable operators and other MVPDs. Time Warner therefore remains disappointed with the CE industry's steadfast refusal to include 1394/5C connectors in every digital television device sold in the United States, including digital receivers, set-top boxes, DVDs, and digital video recorders. We remain hopeful that marketplace forces will ultimately drive such a result.

At minimum, consumers must have a clear and unambiguous understanding of the technical limitations of any digital CE purchased without a 1394/5C connector. Time Warner urges consumer electronics retailers to include the industry agreed-upon disclaimer conspicuously at the point of purchase. This will serve to ensure that consumers have the necessary information to make informed purchasing decisions.

Scrambling

The Commission should decline to consider issues relating to scrambling and tier positions of digital broadcast stations in this proceeding, deferring them instead to the pending Digital Must Carry proceeding. These issues remain inherently intertwined with issues raised by that proceeding and may become moot should the Commission decline to impose digital must carry obligations during the transition period.

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Time Warner Cable ("Time Warner"), by its attorneys, submits these comments in response to the above-captioned Notice of Proposed Rulemaking released by the Federal Communications Commission ("FCC" or "Commission") on April 14, 2000.[1] Time Warner Cable operates cable television systems in numerous communities across the nation and thus has a vital interest in this proceeding.

I. INTRODUCTION

The Commission's overriding goal in this proceeding should be to promote the ability of the public to purchase and use consumer electronics ("CE") equipment, most importantly digital television receivers, that can fully interact with and take advantage of the services available from cable operators and other multichannel video programming distributors ("MVPDs"). Ideally, marketplace forces should incent all affected parties to make it simple and attractive for consumers to have DTV compatible television sets that also provide the full spectrum of interactive and digital services available from MVPDs today or in the future, as well as any native services imbedded in their new equipment. In order to accomplish this goal, digital CE equipment obviously must include adequate connectivity to allow for advanced interactivity, but consumers

[1] Notice of Proposed Rulemaking, PP Docket No. 00-67 (rel. April 14, 2000) ("NPRM").

also need to be clearly and fully informed of the capabilities and limitations of any consumer electronic equipment that they may purchase. The situation should never arise where a consumer purchases an expensive, high-end piece of consumer electronics equipment that was marketed as state-of-the-art or next-generation, only to find that the device lacks the necessary connectivity to receive advanced interactive and digital services available from cable operators or other MVPDs.

This consumer protection objective is fully consistent with past Congressional and Commission policymaking in this area. For example, in the adoption of Section 624A in the 1992 Cable Act, Congress clearly indicated its intention to assure "compatibility between television and video cassette recorders and cable systems . . . so that cable subscribers will be able to enjoy the full benefit of both the programming available on cable systems and the functions available on their television and video cassette recorders."[2] This theme was further expressed by Congress in the 1996 Telecommunications Act when it revised Section 624A and adopted the navigation device provisions of Section 629, a measure designed to give cable subscribers the flexibility to commercially purchase advanced set-top boxes in order to maximize and customize their use of their cable operator's system and its interactive features.[3]

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[2]Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat 1460 (1992) ("1992 Cable Act") at Section 17, adopting Section 624A(b)(1) of the Communications Act.

[3]Telecommunications Act of 1996. Pub. L. No. 104-104, 110 Stat 56 (1996) ("1996 Telecommunications Act") at Section 304, adopting Section 629 of the Communications Act. See also Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97-80, Report and Order, 13 FCC Rcd 14775 (1998) ("Navigation Devices Report and Order"); Order on Reconsideration, 14 FCC Rcd 7596 (1999) (collectively "Navigation Devices proceeding").

This policy has been faithfully mirrored by the Commission in its Equipment Compatibility proceeding.[4] In the Report and Order adopting Section 76.630, the Commission's equipment compatibility provisions, the Commission indicated that two of its primary goals were to "enable [subscribers] to use the special features and functions of their TV equipment with cable service"[5] and to "provide a consumer education program to inform subscribers of potential compatibility problems and methods for resolving such problems."[6] The Commission further elaborated, indicating that it was seeking a result where "consumers . . . have greater access to technology with new features and functions"[7] and also that "[m]ost importantly, consumers will be assured that the equipment they buy will work with their cable system."[8] Commissioner Barrett succinctly summarized the Commission's consumer protection motivations in adopting the equipment compatibility rules:

> [T]he consumer electronics equipment compatibility section of the Cable Television Consumer Protection and Competition Act of 1992 was adopted as a result of consumer confusion and misunderstanding about the technical capabilities of their electronic equipment vis-a-vis their cable systems. Equipment that was called or implied to be "cable ready" or "cable compatible" often led the "uneducated" consumer to believe that he/she would not need a

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[4]Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992: Compatibility Between Cable Systems and Consumer Electronics Equipment, First Report and Order, 9 FCC Rcd 1981 (1994) ("Equipment Compatibility Report and Order"); Erratum at 10 FCC Rcd 714 (1994); Memorandum Opinion and Order, 11 FCC Rcd 4121 (1994) (collectively, "Equipment Compatibility proceeding").

[5]Equipment Compatibility Report and Order, 9 FCC Rcd 1981 at ¶ 2.

[6]Id.

[7]Id. at ¶5.

[8]Id.

> converter or set top box to receive certain cable services. While consumers may have been able to tune certain cable channels, they were often unable to receive any scrambled programming services. In the end, cable operators were faced with unhappy and frustrated subscribers, who had paid large sums of money for electronic equipment that they believed would not require any additional equipment to receive cable service. To help combat consumer confusion, the Commission adopted specifications for "cable ready" and "cable compatible" equipment. We required manufacturers of any consumer television receivers and video cassette recorders ("VCRs") with features that were to be used with cable service, and that did not fully comply with the specifications to so advise consumers.[9]

Very clearly, there is a stated and well-developed national policy for the availability of advanced consumer electronics equipment that is fully compatible with cable system offerings. This policy should now include the next generation of digital and interactive television services. As the Commission correctly observed in the NPRM:

> [b]ecause both the cable and the consumer electronics industries stand to benefit from compatibility, it is not surprising that negotiations between them have produced consensus on a wide range of issues. The Commission has encouraged and facilitated these discussions, in the hope and belief that comprehensive market-driven solutions were attainable and would be superior to a regulatory approach.[10]

Of the two narrow issues raised in this proceeding, labeling and copy protection, Time Warner understands that industry negotiations have in fact led to an agreement on the labeling issue. The principal impediment to copy protection involves unresolved licensing negotiations

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[9]Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992; Compatibility Between Cable Systems and Consumer Electronics Equipment, Memorandum Opinion and Order, 11 FCC Rcd 4121 (1994) (Statement of Comm. Barrett approving in part and dissenting in part).

[10]NPRM at ¶ 3.

between 1) the "5C" companies[11] and their licensing entity, DTLA; 2) content owners represented primarily by the Motion Picture Association of America; and 3) CE manufacturers and retailers. While there may be a role for the Commission to "encourage and facilitate" these ongoing discussions, attempts to apply unrelated FCC rules, such as the navigation device rules, to defeat a true solution among those parties will inevitably backfire, by causing content owners to withhold the high quality digital programming that everyone agrees is essential for the success of digital television. Finally, the Commission should guard against allowing this rulemaking to expand beyond the two narrow issues raised in the NPRM. Such a result would only delay and further complicate the progress being made in the marketplace towards digital TV compatibility, a situation the Commission has wisely concluded to be "superior to a regulatory approach."[12]

II. RELIABLE COPY PROTECTION IS ESSENTIAL TO THE SUCCESS OF DIGITAL TELEVISION

A. High Quality Content Will Not Be Made Available in Digital Format Absent Reliable Copy Protection.

It is widely agreed that the availability of quality digital content is crucial to the successful implementation of digital television by broadcasters and cable operators alike. Indeed, virtually all parties involved, including the consumer electronics industry, the cable industry, broadcasters, and content providers, acknowledge that quality digital content must be made available to consumers if the transition from an analog environment to a digital environment is to be successful. In a recent letter to the Commission, Circuit City noted the industry consensus on this issue:

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[11]Intel, Hitachi, Toshiba, Matsushita, and Sony.

[12]Id.

> There was agreement at the roundtable that a reasonable assortment of high value content is a critical ingredient for the successful launch of any new format ... [T]he availability of compelling movie content is essential.[13]

Given the existence of widespread agreement that quality digital content is essential for the success of digital television, the Commission must protect MVPDs and content providers against unauthorized copying, thereby ensuring the availability of digital content. As the Commission recognizes in the NPRM:

> With a digital source, high quality copies can be made and further reproduced with virtually no degradation in quality. This has prompted content owners to express strong concerns about unauthorized reproduction of copyrighted material.

Further, Commissioner Ness has stated:

> One of the obstacles preventing the free-flow of digital programming is copy protection. Given the ease with which digital information can be replicated, the perfect quality of every digital copy, and the limitless distribution potential of the Internet, content producers understandably are concerned about placing their works on a cable system or broadcast network without adequate protections in place ... But if a first-run digital product immediately can be captured off air or off cable and replicated like a master copy or webcast globally - without payment to copyright holders, producers are going to be reluctant to release their product.[14]

The fact that high quality copies of digital signals can be made and reproduced without degradation in quality makes it possible to produce an unlimited number of unauthorized, perfect copies from a single digital source. The consequences of piracy and copyright infringement are,

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[13]Letter from W. Alan McCollough, Circuit City Stores, Inc., to Commissioner Susan Ness, Federal Communications Commission, (Dec. 28, 1999).

[14]"American Family Goes Digital," Remarks of FCC Commissioner Susan Ness before the California Cable Television Association Western Show, Los Angeles, California (December 16, 1999) (as prepared for delivery) at 4 ("Ness Western Show Remarks")

therefore, especially harsh for content providers, given the ease with which high quality digital copies can be made and distributed. It is thus certainly understandable that content providers are unwilling to license digital content absent concrete assurances that any copy protection conditions in such licenses are strictly enforced. Accordingly, copy protection must be incorporated into digital televisions, DVD players and other digital terminal devices so as to allow decrypted digital signals to flow directly to the final display circuit of consumer video equipment, but not to any circuit where such decrypted signals can be stored, forwarded, copied, or exported.

For the transition to digital television to become a reality, it is essential for MVPDs to implement adequate signal security safeguards for their networks and for copyright holders to erect barriers against unauthorized use or copying of any works delivered in a digital format. Reliable copy protection is essential to the success of digital television because content providers will refuse to provide high quality programming for carriage on MVPD platforms without assurances against unauthorized copying. The absence of high quality programming, such as motion pictures and other filmed entertainment, consequently, will provide a strong disincentive for consumers to purchase digital television sets, thus seriously jeopardizing the transition to digital television.

B. Reservation of Conditional Access Licenses to Those Host Devices Able to Honor Copy Protection Instructions is Fully Consistent with Section 629 of the Act and Section 76.1200 et seq. of the Commission's Rules

Based upon the foregoing, it is readily apparent that it is in the best interest of all affected parties, including CE manufacturers and retailers, MVPDs, copyright owners, the Commission, and ultimately the public interest in facilitating the availability of digital television, to allow the marketplace to implement whatever measures may be necessary to ensure a fully effective copy

protection regime and that such implementation occur as soon as possible. Achievement of this goal will require a solution in each of two general areas: licensing of copy protection intellectual property ("IP") and technical issues.

As noted above, the licensing of 5C copy protection IP involves ongoing negotiations between the 5C companies, MPAA, and the CE industry.[15] Thus, it does not appear that there are any concrete actions the Commission can take in this proceeding that would resolve (rather than exacerbate) this matter, other than, as stated in the NPRM, to "encourage and facilitate" such discussions. Similarly, the cable industry is simply an interested bystander to these negotiations. Nevertheless, Time Warner is firmly committed to implementing whatever copy protection scheme will result in the broadest and fastest availability of high-quality digital content to consumers. Time Warner encourages the content community and the holders of copy protection IP to continue working towards the completion of a licensing agreement. Reliable copy protection is essential for the successful transition to digital television.

Technical issues surrounding the implementation of copy protection are largely being resolved in the marketplace. As explained below in Section III of these comments, in the case of a digital set-top box connected to a digital television, the presence of the IEEE 1394/5C connector[16] ensures that copy protection instructions are carried forward into, and complied with

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[15]As Chairman Kennard has stated; "the Commission has encouraged negotiations between content providers and distributors and CE manufacturers. 5C appears to be the most promising copy protection technology." "IPTV: From the Vast Wasteland to the Vast Wonderland." Address by Chairman William E. Kennard, Federal Communications Commission to the Consumer Electronics Show, Las Vegas, Nevada (January 7, 2000)(as prepared for delivery).

[16]1394/5C refers to the DVS-194rl specification which includes the IEEE ("firewire") 1394 high performance serial bus interface, 5C Digital Transmission Content Protection

by, the digital display or storage device. Without 1394/5C, copy protected material simply cannot be displayed by digital TVs.

The situation is more complex in the case of an "integrated" digital video display or storage device, *i.e.*, a device that does not require a digital set-top box, but rather uses a MVPD-supplied point-of-deployment ("POD") module to perform certain conditional access functions. In this scenario, there is no 1394/5C connection between a digital set-top box and the display/storage device to ensure that copy protection instructions are honored. Thus, for copy protection to be implemented in this context, it is necessary for the POD security module to itself employ encryption and authentication for content protection across the POD-host interface and that any POD decryption/authentication licensing impose content protection obligations on the host device. In keeping with the Commission's expressly stated preference for marketplace solutions over a regulatory approach, Cable Labs has proposed to limit the availability of retail POD interconnection licenses to CE devices that can assure that copy protection instructions will be faithfully honored.[17]

Circuit City has sought to undermine this market-driven solution to copy protection by asserting "that the draft Cable Labs license for utilization of 'DFAST' scrambling technology in POD modules imposes certain obligations on the competitive host device (*e.g.*, a consumer

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("DTCP") technology, and graphics support in the digital television set. Notably, the 1394/5C specifications have been developed through market-driven, industry-to-industry negotiations, rather than by FCC regulation, fully consistent with the sprit of Section 624A of the Act. Time Warner is confident that such continued industry cooperation will lead to evolutionary improvements to the 1394/5C interactive digital interface/copy protection specifications.

[17]See NPRM at ¶ 20.

television receiver or set-top box purchased at retail) that should be imposed only on the POD module itself."[18] As shall be shown below, Circuit City's assertions are legally incorrect. More importantly, however, if Circuit City is successful in its efforts to undermine legitimate signal security and conditional access interests of copyright owners and MVPDs, the viability of the entire transition to digital television will be seriously jeopardized.

Both the 1996 Telecommunications Act and the Commission's rules allow POD/DFAST licenses to be restricted to host devices capable of honoring copy protection instructions. In particular, Section 629(b) of the Act unequivocally states that:

> The Commission shall not prescribe regulations under subsection (a) which would jeopardize security of multichannel video programming and other services offered over multichannel video programming systems, or impede the legal rights of a provider of such services to prevent theft of services.[19]

Under Section 629(b), if the Commission were to restrict any requirement that host devices manufactured to work with digital PODs must comply with copy protection protocols, the Commission would clearly be impeding the rights of MVPDs to prevent theft of service.

Section 76.1209 of the Commission's rules provides additional support for content providers seeking protection against unauthorized copying. Section 76.1209 states that no provision contained in Subpart P of the rules should be construed "to authorize or justify any use, manufacture or importation of equipment that would violate ... any ... provision of law intended

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[18] Id.

[19] 47 U.S.C. §549(b).

to preclude the unauthorized reception of multichannel video programming service."[20] Host devices that ignore copy protection instructions would violate Section 76.1209, because the devices would allow unauthorized reception of multichannel video programming service.

The Commission is well aware that signal piracy and theft of service are among the most costly problems faced by the cable television industry and MVPDs. Signal piracy costs the cable industry alone billions of dollars each year and is a persistent problem. Piracy not only deprives cable operators and copyright owners of their right to be fairly compensated for the product of their investment, but it also imposes substantial costs on honest citizens who are forced to bear the cost of freeloading pirates seeking to obtain a product without paying. The problem of cable signal theft is further exacerbated in a digital environment, where the ubiquity of low cost computing power and the computer's ability, given the proper programming, to emulate most any piece of electronic hardware, gives the user the ability to create an unlimited number of unauthorized, perfect copies from a single digital source.

Circuit City's claim that copy control and protection are "unrelated" to system security and conditional access is entirely without merit. Assuring that the terms of a content license between a copyright owner and a MVPD are honored goes to the very heart of Congressional concern over unauthorized reception. For example, content owners often agree to license recent feature films to premium services such as HBO only for the private home viewing of legitimate

[20] 47 C.F.R. §76.1209.

paying subscribers. When such services are displayed by a commercial establishment open to the public, such as a bar or restaurant, such unauthorized reception is actionable under the law.[21]

Similarly, copy protection allows the copyright owner to license its intellectual property with very explicit digital copying instructions, such as "copy once," "copy freely," or "no copying allowed." A CE manufacturer or retailer that designs or sells a device able to countermand or ignore these copy protection instructions is facilitating unauthorized reception every bit as much as the commercial establishment engaged in the public display of copyrighted works that have been licensed exclusively for private home viewing.

The Commission's authority to require copy protection also is consistent with Section 76.1204(c) of the Commission's rules, which does not prohibit the use of contracts, agreements, patent rights, or intellectual property rights to prevent the retail availability of navigation devices that would override copy protection instructions.[22] A licensing agreement limiting POD/DFAST licenses to CE devices that honor copy protection standards would be fully compliant with Section 76.1204(c), provided such agreement does not preclude the addition of features to the CE device not intended to defeat conditional access controls.

Moreover, Section 76.1204(a)(1) of the Commission's rules is also entirely consistent with limiting POD/DFAST licenses to CE equipment that is fully compliant with copy protection

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[21] See, e.g. , That's Entertainment, Inc. v. J.P.T., Inc., 843 F. Supp. 995 (D. Md. 1993) [display of pay-pay-per view event authorized for private home viewing was unauthorized when shown to patrons of commercial establishment]; Quincy Cablesystems v. Sully's Bar, 640 F. Supp. 1159 (D. Mass. 1986) [receipt of unscrambled satellite transmission authorized for private home viewing was unauthorized when displayed to customers of commercial establishment.]

[22] 47 C.F.R. §76.1204(c).

protocols. That provision merely requires that POD modules available after July 1, 2000 incorporate "only the conditional access functions" of any integrated set-top boxes offered for lease by the cable operator.[23] The rule does not require that all conditional access functions be included in the POD. Rather, Section 76.1204(a)(1) simply requires that only conditional access functions be included in the POD.

Indeed, the architecture of the POD/host technology functions according to the "handshake" concept, whereby certain aspects of any conditional access methodology must reside both in the POD and in the host. The Commission recognizes as much in the NPRM, where it notes that "any firm wishing to manufacture digital navigation devices, including television receivers, designed to interoperate with digital cable would need a license from OpenCable to utilize the POD intellectual property."[24] If all conditional access functions could reside exclusively in the POD, no such license would be necessary.[25] But given that any effective conditional access scheme requires the POD and host to communicate and to work together, a requirement that the POD/DFAST license be limited to CE devices that are fully compliant with copy protection is entirely appropriate.

In any event, this issue has already been squarely addressed by the Commission. In the Navigation Devices Report and Order, the Commission expressly determined that "[c]opy

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[23]47 C.F.R. §76.1204(a)(1).

[24]NPRM at ¶ 20.

[25]Similarly, as Commissioner Ness has recognized, "[c]opy protection will only work if all of the network equipment, consumer equipment and software enable it..." Ness Western Show Remarks at 5. The proposed conditioning of the POD/DFAST license is a reasonable, market-driven solution to the achievement of this result.

protection systems and devices that impose a limited measure of data encryption control over the types of devices that may record (or receive) video content would not be subject to the separation requirement" of Section 76.1204 of the rules.[26]

Finally, the legislative history of Section 629 explicitly states that the "conferees intend that the Commission avoid actions which would have the effect of freezing or chilling the development of new technologies and services."[27] Because the success of digital television is directly linked to the implementation of reliable copy protection, conditional access technology must be included in host devices to avoid impeding the deployment of digital television.

III. DIGITAL CONSUMER ELECTRONIC PRODUCTS SHOULD BE CLEARLY LABELED TO IDENTIFY THOSE PRODUCTS UNABLE TO SUPPORT ALL SERVICES OFFERED BY CABLE OPERATORS.

As the Commission observed in the NPRM, it is of critical importance "that consumers have a clear understanding of the capabilities of the digital television receivers that they purchase."[28] Indeed, the Commission has clear jurisdiction under Section 624A(c)(2)(A) of the Act to require CE manufacturers to clearly and unambiguously label CE products to ensure that consumers are not misled.[29] Despite this repository of statutory power to impose labeling requirements on CE manufacturers, Time Warner concurs with the Commission that "comprehensive market-driven solutions ... would be superior to a regulatory approach."[30]

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[26]Navigation Devices Report and Order, 13 FCC Rcd 14775 at ¶ 63.

[27]Conf. Rep. at 181; 142 Cong. Rec. S700 (Feb. 1, 1996).

[28]NPRM at ¶ 9.

[29]See also 47 U.S.C. §330.

[30]NPRM at ¶ 3.

As evidence of the success of such an approach, we note that the National Cable Television Association ("NCTA") and the Consumer Electronics Association ("CEA") have agreed on a voluntary labeling scheme designed to carry out the consumer protection goals referenced in the Act and the NPRM. The primary purpose of this labeling scheme is to distinguish between those CE devices that will be able to deliver the full functionality offered by cable operators and other MVPDs, and those devices only able to deliver a limited subset of such functionalities, services, and programming.

Time Warner's concern with this labeling scheme arises with regard to potential consumer confusion and frustration in distinguishing between digital television sets that are equipped with a high-speed interactive digital interface (IEEE 1394/5C)[31], and those lacking such interactive connectivity. Without a 1394/5C connector, digital television sets will be unable to provide consumers with the full functionality of interactive digital services available from cable operators and other MVPDs now and in the future. Consumers are entitled to clear and unambiguous information about the technical limitations of any digital CE purchased without 1394/5C.

The first and most obvious source of significant consumer frustration with digital CE devices without 1394/5C is likely to occur with regard to copy protected material. As recognized in the NPRM, Appendix I to the Feb. 22, 2000 letter submitted to the Commission jointly by NCTA and CEA establishes the necessary protocols for connectivity between cable systems and digital televisions.[32] But this agreement falls short of a commitment by CEA to include IEEE

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[31]See n.16, supra.

[32]NPRM at ¶ 3.

1394/5C on all digital televisions. Without 1394/5C, when a digital cable set-top box is connected to a digital television, any copy protected material simply cannot be displayed.

Time Warner anticipates this problem will commonly arise in connection with cable services that rely heavily on recently released feature films, such as video-on-demand or impulse pay-per-view. Copyright owners can be expected to insist that copy protection be included on digital versions of any recent theatrical films offered by such services. But the impact could be much more widespread. As the NPRM recognizes, "[w]ith a digital source, high quality copies can be made and further reproduced with virtually no degradation in quality. This has prompted content owners to express strong concerns about unauthorized reproduction of copyrighted material."[33] Thus, copyright owners may demand that copy protection be included on material licensed for premium services such as HBO or Showtime, or even for cable programming services such as TNT or Lifetime. Thus, depending on the degree to which copyright owners elect to insist on copy protection for digital distribution of their works, TV sets without 1394/5C could often display only a blank screen.

Given the great potential for consumer dissatisfaction emanating from the manufacture and sale of digital CE without 1394/5C, Time Warner is disappointed by the steadfast refusal by the CE community to agree to include 1394/5C connectors on all digital CE. As we understand it, CE manufacturers have argued that consumers should have the option to purchase "low-end" digital CE and not have to pay extra for unwanted features and functions. CE manufacturers

[33]NPRM at ¶ 11.

often point to the demand for less expensive TV sets, typically with a screen size of 13" or less, that do not include advanced functions often included on larger sets, such as picture-in-picture.

Time Warner finds it hard to believe that there will be any real demand for digital TV sets with a screen size of 13" or less any time soon. We doubt if any manufacturer even has any plans to offer such a device. Moreover, given that digital TV set retail prices typically range from $3,000 to $10,000 and up, claims by CE manufacturers that inclusion of 1394/5C, at a nominal incremental cost, will have any material adverse impact on consumer demand for digital CE seems disingenuous at best. Nevertheless, Time Warner understands that the labeling agreement reached between NCTA and CEA was a compromise. We continue to agree that such agreements produced through private negotiations, and responsive to marketplace forces, are more likely to achieve results able to adapt to a rapidly evolving environment than would a regulatory regime.

Turning to the actual labels embodied in the compromise, while Time Warner is comfortable with the label "Digital TV-Cable Interactive" for digital television devices which include 1394/5C, the label for digital TV devices lacking 1394/5C - - "Digital TV-Cable Connect" - - could lead to consumer confusion or frustration. By focusing exclusively on this label, particularly use of the term "Cable Connect," consumers might be misled to believe that by connecting their cable service to such devices, they would be able to receive any and all of the services and functionalities available from their cable operator. But, as explained above, devices that do not include 1394/5C will be unable to deliver the full range of services available from cable operators and other MVPDs.

It is for this reason that the labeling compromise did not stop at the labels alone. Rather, digital CE devices bearing the "Digital TV-Cable Connect" label must also include the following disclaimer:

> **THIS DIGITAL TELEVISION DEVICE IS NOT EQUIPPED WITH A 1394 DIGITAL CONNECTOR. AS A RESULT, THE CABLE SERVICES IT RECEIVES MAY BE LIMITED. WHEN USING THIS TELEVISION DEVICE, YOU MAY NOT RECEIVE THE CABLE OPERATOR'S ADVANCED AND INTERACTIVE DIGITAL SERVICES AND HIGH DEFINITION PROGRAMMING, SUCH AS IMPULSE PAY-PER-VIEW, VIDEO-ON-DEMAND, ENHANCED PROGRAM GUIDE, AND DATA-ENHANCED TELEVISION SERVICES. PLEASE CONTACT YOUR CABLE OPERATOR FOR SERVICE AND PROGRAMMING OPTIONS.**

Time Warner urges that consumer electronics retailers clearly and unambiguously provide the contents of this disclaimer to consumers at the point of purchase. Consumer confusion will not be reduced if the disclaimer is merely buried in the fine print of the owner's manual to be read by the consumer, if at all, only after the device has been purchased and taken home. For this reason, Time Warner would further urge consumer electronic retailers to offer a 60-day money back guarantee on the purchase of any digital CE that does not include a 1394/5C connector.

In sum, Time Warner submits that the ultimate long-term solution would be to include a 1394/5C connector on all digital television devices sold in the United States, including all new digital receivers, set-top boxes, DVDs and digital video recorders. In the meantime, in order to fully protect consumers, any labeling scheme must accurately communicate the capabilities and limitations of digital devices so as to avoid misleading consumers. Moreover, only truly "low-end" digital CE devices should be allowed to be marketed without 1394/5C. Thus, for example,

any digital TV sets with a screen size in excess of 13" should be required to satisfy the "Digital TV-Cable Interactive" category.

Finally, any digital TV set, regardless of screen size, that includes any advanced functionalities such as picture-in-picture or an on-screen guide could not qualify as low-end, and thus should be required to include 1394/5C. The Commission's rules regarding retail availability were intended to enhance consumer choice through compatible solutions enabling the evolution of CE and cable-provided functionality - not to allow CE to set up its own advanced functionality relying on cable connectivity but effectively blocking a consumer's choice to obtain advanced cable services. Any "low-end" exception should not be a loophole to inhibit consumer choice.

IV. ISSUES INVOLVING SCRAMBLING OF DIGITAL SIGNALS SHOULD BE DEFERRED TO THE DIGITAL MUST CARRY PROCEEDING

In its NPRM, the Commission observes that "labeling and copy protection are the only outstanding compatibility issues."[34] Moreover, the Commission states its purpose in the NPRM "is to finalize the process that the cable and consumer electronics industries have largely completed."[35] Indeed, the NPRM states that "[b]ecause virtually all of the major issues have already been resolved through industry cooperation, we are confident that this proceeding can be completed promptly..."[32] Incongruously, at ¶ 17 of the NPRM, the Commission raises several questions unrelated to the two narrow issues that are the proper focus of this proceeding, and that are being addressed in another ongoing proceeding. Accordingly, the Commission should defer

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[34]NPRM at ¶ 21.

[35]Id. at ¶ 22.

[32]Id. at ¶ 13.

issues relating to scrambling and tier placement of digital broadcast signals to its Digital Must Carry proceeding.[33] As the Commission correctly surmises, digital scrambling and tier placement issues are inherently intertwined with issues raised in that docket.

Current Commission rules require 1) delivery of basic service in the clear,[34] and 2) the basic tier to include all local broadcast signals.[35] In its Digital Must Carry proceeding, the Commission is addressing issues such as 1) will cable operators be required to carry both a broadcaster's primary analog signal and its secondary digital signal in the potentially infinite "transition" period from analog to digital?; 2) if so, will both signals have to be included on the basic tier?; 3) if so, how can the requirement of an "unscrambled" basic possibly be satisfied since a digital signal will necessarily need to be "unscrambled" (*i.e.*, converted from digital to analog) to be displayed on an analog television set?[36] The complexity of scrambling and tier placement issues as they relate to digital signals therefore dictates against Commission consideration of them in the abstract.

Assuming the Commission properly denies broadcasters' efforts to obtain must carry for both their analog and digital signals during the transition, cable operators will be able to meet their obligations under existing tier placement and scrambling requirements, and the issues posited by the NPRM will become moot. The need to revisit the scrambling and tier placement

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[33]See Notice of Proposed Rulemaking, CS Docket No. 98-120, 13 FCC Rcd 15092 (1998). "Digital Must Carry proceeding").

[34]See 47 U.S.C. §534(b)(7); see also 47 C.F.R. §76.56(d).

[35]See 47 U.S.C. §535(h); see also 47 C.F.R. §76.901(a).

[36]Moreover, even on a digital TV set, a digital signal will need to be converted from VSB to QAM modulation.

provisions will only become an issue in the unfortunate event the Commission extends must carry to digital transmissions during the transition period. Indeed, the unworkability of existing statutory language under a "double dose" must carry regime provides yet another reason why Congress could not have intended a digital must carry requirement. Nonetheless, Commission consideration of these issues remain more appropriately as part of the digital must carry proceeding. The Commission therefore should decline to consider these issues at this time.

V. CONCLUSION

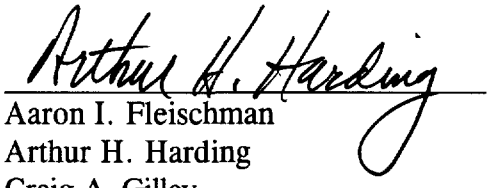
Given that the affected industries have now reached a compromise on the digital TV labeling issue, there does not appear to be any need for Commission action at this time. However, the Commission should continue to closely monitor the situation to ensure that any digital TV sets bearing the "Digital TV-Cable Connect" label also prominently included the agreed-upon disclaimer. In the area of licensing copy protection IP, the Commission appears to have little jurisdiction over the affected parties. The Commission should continue to pursue its policy of encouraging and facilitating discussions among the affected parties so as to achieve "comprehensive market-driven solutions." In particular, the Commission should expressly endorse the use of the POD/DFAST licensing process as a creative, marketplace approach to providing the appropriate copy protection which all parties agree is essential to the successful roll-out of digital television. Finally, the Commission should guard against efforts to expand the scope of this proceeding beyond the two, narrow technical issues raised in the NPRM. Allowing this proceeding to become bogged down in issues currently under consideration in other ongoing Commission proceedings would be directly contrary to the Commission's stated goal that this

proceeding "be completed promptly . . .[37] As Chairman Kennard has stated, "[d]elay is simply not an option."[38]

Time Warner urges the Commission to promptly terminate this proceeding in accordance with the principles set forth in these comments.

Respectfully submitted,

TIME WARNER CABLE



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[37]NPRM at ¶ 13.

[38]Id., Press Statement of Chairman William Kennard, April 13, 2000.